

## RESEARCH

# Clinical usefulness of 'vocal fremitus' and 'vocal resonance'

## GP perceptions and practice

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**Assessment of vocal fremitus (VF) and vocal resonance (VR) (whereby vocal vibrations are felt or heard during a clinical examination) is an established part of physical examination of the respiratory system. Textbooks on clinical examination include these procedures as part of the standard method.<sup>1-3</sup>**

Undergraduate and postgraduate candidates are required to perform VF and VR when they undertake qualifying assessments, however the reliability of findings from these procedures is controversial.<sup>4</sup> It is also unusual to see experienced doctors performing VF/VR during actual chest examination. The author of the only identifiable study on clinicians' attitudes toward VF/VR (which had only 14 respondents) remarked 'it will be rare to see physicians doing both or even one of them although the majority has answered true (to the statement that 'one should examine both VF and VR').<sup>5</sup>

The objective of this study was to find out how often medical practitioners perform VF/VR and their opinions of the value of these procedures.

### Method

The study was conducted in the Mackay region of Queensland. The sample included all practising full time or part time general practitioners. There were approximately 100 GPs practising in the area at the time of survey (the number of practising GPs in the region varies seasonally). Questionnaires were faxed to all general practice clinics by the Mackay Division of General Practice. Practice managers were requested to distribute the forms to all doctors in their clinics and then to fax GPs' anonymous responses to the division.

The questionnaire was simple, short, and closed ended to facilitate participation by busy GPs. It gathered information on the number and type of patients the GP saw during the previous month, the frequency of performing VF or VR during examination of the chest, and sought GPs' opinion about the usefulness of the tests and the desirability of performing them routinely.

The study was approved by the Ethics Committee at Mackay Base Hospital.

### Results

Sixty-seven responses were obtained (64 GPs and three general practice registrars), providing a response rate of approximately 70%. Forty-four respondents (65.7%) rarely performed VF/VR as part of routine chest examination (Figure 1).

More than half (53.7%) disagreed with the statement that 'routine inclusion of either VF or VR on chest examination is desirable' (with 11.9% strongly disagreeing). More than a quarter (28%) remained neutral. The response to the statement that 'some chest diseases can be missed on clinical examination if VF or VR is not performed' was heterogeneous (Figure 2).

### Discussion

The response rate to this very brief questionnaire was good (approximately 70%), exceeding the 61% average response rate for mailed physician questionnaires.<sup>6</sup> The results can be taken as a reasonable representation of the views of GPs in the Mackay region.<sup>7</sup>

No data is available from other studies on the number of practising doctors who routinely perform VF/VR procedure during chest examination. The aim of this survey was to test the hypothesis that most practitioners do not perform VF/VR on a regular basis. Most of the GPs who responded to the survey said they rarely performed VF/VR examination as a routine during chest examination. Stated practice may of

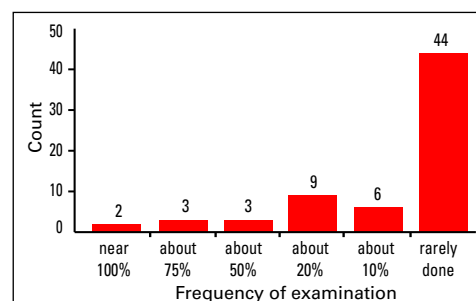


Figure 1. Frequency of VF/VR examination

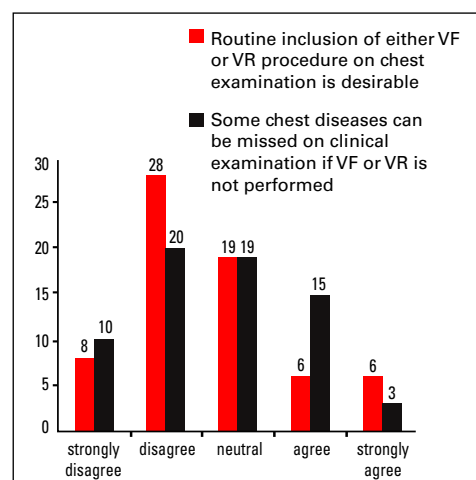


Figure 2. Responses to two statements about VF and VR

course vary from actual practice.

This survey was not designed to find out why GPs do or do not perform VF/VR as a routine. Time constraints of busy clinics can be a contributing factor, especially when GPs appear unconvinced by the usefulness of the procedures (more than half of the GPs in this study did not think that routine VF/VR examination is desirable). At the same time, however, nearly half thought that some chest conditions can go undetected if VF/VR is not examined.

A second study is planned to evaluate the clinical usefulness of VF/VR in chest conditions such as asthma, chronic obstructive airway disease, pleural effusion and consolidation. The findings of the present survey in conjunction with the second study should help to elucidate the role of VF/VR in chest examination.

## Implications for general practice

- The majority of GPs in this study rarely perform VF/VR as a routine during chest examination.
- More than half did not think that routine VF/VR examination is desirable.
- Nearly half thought that some chest conditions can go undetected if VF/VR is not examined.

Conflict of interest: none declared.

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